

Application Serial No. 08/180,701, filed January 13, 1994, which is a continuation of Application Serial No. 07/918,927, filed July 22, 1992, which is a continuation of Application Serial No. 07/787,760, filed November 6, 1991, which is a continuation of Application Serial No. 07/044,719, filed May 1, 1987. Finally, Applicant has not abandoned this application, nor has he filed an Appeal Brief. Accordingly, Applicant has satisfied the requirements of § 1.129(a).

Please amend this application as follows:

**IN THE CLAIMS:**

Please cancel claims 37-71, without prejudice or disclaimer, and please add the following new claims 72-101:

- 72. A method of transferring a gene into an animal, comprising:
- (a) transfecting somatic cells *in vitro* with a DNA sequence and without a viral vector, wherein the DNA sequence comprises no DNA of retroviral origin, wherein the DNA sequence comprises the gene and a promoter operably linked to the gene;
  - (b) screening the resulting transfected somatic cells *in vitro* to select a cell possessing desired expression properties;
  - (c) cloning and expanding the selected somatic cell *in vitro*; and
  - (d) administering the resulting cloned and expanded somatic cells to the animal.

73. The method of claim 72, wherein the somatic cells are human cells.

74. The method of claim 73, wherein the human cells are selected from the group consisting of fibroblasts, myocytes, hepatocytes, kidney capsular cells, endothelial cells, epithelial cells of the gut, and pituitary cells.

75. The method of claim 73, wherein the gene encodes a hormone, an enzyme, or a receptor.

76. The method of claim 73, wherein the gene encodes human growth hormone.

77. The method of claim 73, wherein the gene encodes human insulin.

78. The method of claim 73, wherein the transfection involves calcium phosphate-mediated transfection, microinjection, electroporation, or DEAE-dextran transfection.

79. The method of claim 73, wherein the transfected cells were originally obtained from an animal of the same species as that of the animal.

80. The method of claim 73 wherein the promoter is not of viral origin.

~~81. The method of claim 73, wherein the promoter is not of retroviral origin.~~

82. The method of claim 73, wherein the promoter is a regulatable promoter.

83. The method of claim 73, wherein the DNA sequence further comprises a selectable gene, and wherein the promoter is operably linked to the selectable gene.

84. The method of claim 73, wherein the screening step further involves screening the resulting transfected somatic cells *in vitro* to select a cell possessing desired regulation properties.

85. The method of claim 73, wherein the screening step further involves screening the resulting transfected somatic cells *in vitro* to select a cell free from a deleterious integration event.

86. The method of claim 73, wherein the DNA sequence cannot recombine with an endogenous retrovirus in the genome of the animal.

87. A method of transferring a gene into an animal, comprising:

- (a) transfecting somatic cells *in vitro* with a DNA sequence and without a retroviral vector, wherein the sequence comprises no DNA of retroviral origin, wherein the DNA sequence comprises the gene and a promoter operably linked to the gene;
- (b) screening the resulting transfected somatic cells *in vitro* to select a cell possessing desired expression properties;
- (c) cloning and expanding the selected somatic cell *in vitro*; and
- (d) administering the resulting cloned and expanded somatic cells to the animal.

88. The method of claim 87, wherein the somatic cells are human cells.

89. The method of claim 88, wherein the human cells are selected from the group consisting of fibroblasts, myocytes, hepatocytes, kidney capsular cells, endothelial cells, epithelial cells of the gut, and pituitary cells.

90. The method of claim 88, wherein the gene encodes a hormone, an enzyme, or a receptor.

91. The method of claim 88, wherein the gene encodes human growth hormone.

92. The method of claim 88, wherein the gene encodes human insulin.

93. The method of claim 88, wherein the transfection involves calcium phosphate-mediated transfection, microinjection, electroporation, or DEAE-dextran transfection.

94. The method of claim 88, wherein the transfected cells were originally obtained from an animal of the same species as that of the animal.

95. The method of claim 88, wherein the promoter is not of viral origin.

~~96. The method of claim 88, wherein the promoter is not of retroviral origin.~~

97. The method of claim 88, wherein the promoter is a regulatable promoter.

98. The method of claim 88, wherein the DNA sequence further comprises a selectable gene, and wherein the promoter is operably linked to the selectable gene.

99. The method of claim 88, wherein the screening step further involves screening the resulting transfected somatic cells *in vitro* to select a cell possessing desired regulation properties.

100. The method of claim 88, wherein the screening step further involves screening the resulting transfected somatic cells *in vitro* to select a cell free from a deleterious integration event.

101. The method of claim 88, wherein the DNA sequence can not recombine with an endogenous retrovirus in the genome of the recipient subject.--

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